

REMARKS

Entry of the foregoing amendments and reconsideration of this application is respectfully requested. By this amendment, claims 12-16 have been canceled in conformance with the election previously made and claims 1, 3, 17, 18, and 24 have been amended to more specifically set forth the invention. No additional fee is required for these claims. Claims 1-11 and 17-26 remain in the application. Reconsideration is respectfully requested.

Objections to the drawings

The Examiner objected to the drawings because of improper crosshatching. Applicant will provide new formal drawings with proper crosshatching in conformance with the rules after allowance of the application.

35 U.S.C. 103(a) REJECTION

Claims 1-11 and 17-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pogge et al., U.S.P. 5,998,868, in view of Hantusch, U.S.P. 4,286,374. Applicant believes that the amendment to the claims overcomes this rejection.

For example, claim 1 now specifies "a second smaller cavity within the first cavity underlying a reactive component mounting region defined on the second surface". Further, each of the other claims now includes a high dielectric area beneath a reactive component mounting region for the installation of reactive components, such as inductors, resistors, and capacitors. Thus, the pedestal on the die attach surface not only aligns and mounts semiconductor die but also provides a cavity that is a high dielectric region for electrically separating reactive components from the base or substrate. This feature greatly improves the operation of reactive components and the integrated circuits in which they are included.

It should be noted that the amendments to the claims do not claim anything different than was originally claimed (see for example claim 24) and, therefore, do not require any additional consideration or searching on the part of the Examiner. The amendments to the claims simply set forth the invention more specifically. Also, a clerical error in which the pedestal is described as having a height slightly less than the depth of the recess (e.g. claim 24) has been rectified. This claim restriction now matches the description in the specification (page 33, lines 8-10).

Applicant specifically traverses the Examiner's statements of judicial notice on pages 3 and 4 of the Office Action. The dimensions of the pedestal are clearly described and claimed as smaller than the cavity in the die to allow for proper alignment and contact between the upper surface of the pedestal and the lower surface of the die (specification, pages 31-32, last and first lines). Here it should be noted that the height of the pedestal is slightly greater than the depth of the cooperating recess to provide positive contact between portions of the upper surface of the pedestal and portions of the lower surface of the die. Thus, the manufacturer does not have to rely on very tight tolerances, which greatly increase the expense. The prior art, of which Pogge et al. is an example, attempt to manufacture the projections and matching recesses exactly the same size. Any differences, even within tolerances, produce a change in position. Also, the shape of the pedestal can be important because it will align the die in all directions. Further, manufacturing an inductor with a high Q on/in an integrated circuit has virtually evaded the prior art. Applicant's novel claimed structure can provide high Q inductors which are, therefore, novel. Finally, the fact that air dielectrics are well known is no reason to imply that it would be obvious to incorporate a cavity in the structure of either Pogge et al. or Hantusch. It is incumbent on the Examiner to cite for actual consideration any prior art disclosing these several claimed features of applicant's

structure that are not disclosed by Pogge et al. or Hantusch.

Nothing in the teaching or disclosure of Pogge et al. or Hantusch describe or suggest structure similar to applicant's claimed structure. Further, nothing in the teaching or disclosure of Pogge et al. or Hantusch would lead one skilled in the art to form a structure similar to the claimed structures of applicant. Therefore, applicant believes that claims 1-11 and 17-26 are not obvious in view of any proper combination of Pogge et al. and Hantusch.

SUMMARY

Since none of the applied references, individually or in any proper combination, disclose structure similar to applicant's claimed structure and since none of the applied references can achieve the functions of the present invention, applicant believes that claims 1-11 and 17-36 are now in condition for allowance.

Should there be any questions or remaining issues regarding the foregoing, Examiner is cordially invited to telephone the undersigned attorney for a speedy resolution.

Respectfully requested,



Robert A. Parsons
Attorney for Applicant
Registration No. 32,713

24 April 2003
340 East Palm Lane, Suite 260
Phoenix, Arizona 85004
(602) 252-7494

FAX RECEIVED

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